

MANAGEMENT OF DELHI'S URBAN GROWTH & SHRINKAGE



Presented By:

Bikram Kumar Dutta and Sanhita Bandyopadhyay

PRESENTATION STRUCTURE

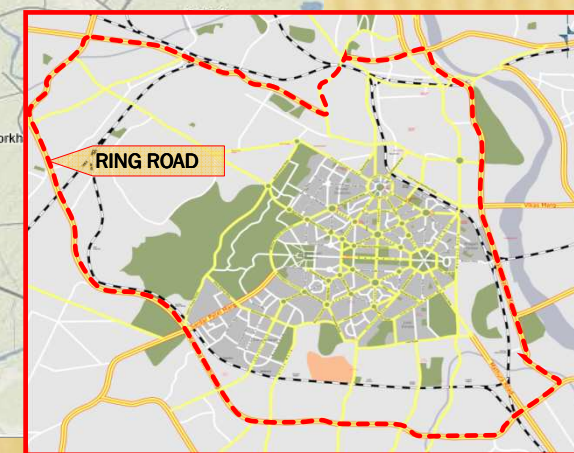
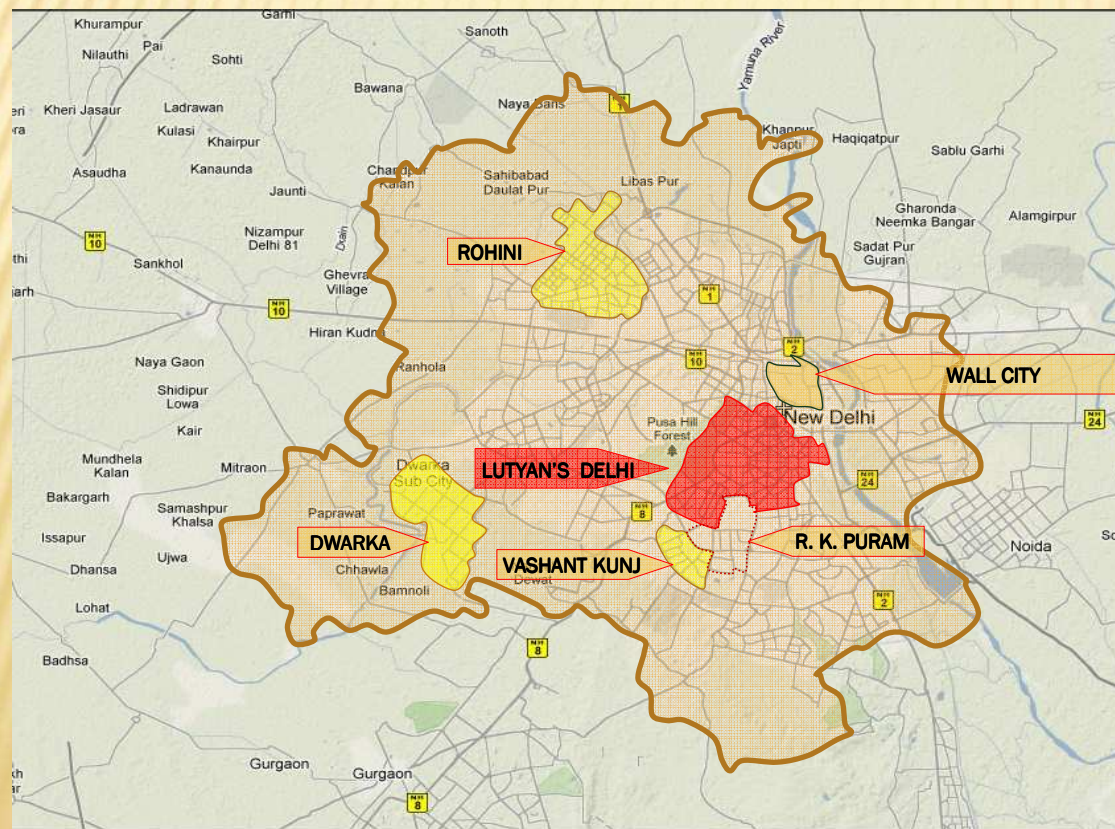


- INTRODUCTION
- NEED OF STUDY
- DAWN OF CITY
- SPATIO-TEMPORAL GROWTH OF DELHI
- CITY GROWTH WITH DIFFERENT MASTER PLANS
- PULL AND PUSH FACTOR FOR SHRINKAGE OF PRIMACY
- CONCLUSION

INTRODUCTION

All cities are “living entities”, which go through a life-cycle as the birth, growth, consolidation, expansion, decline, and quite often some kind of end, or state of decay, unless they are “turned-around” and “revived” by combined human effort

....Mumford, 1966)



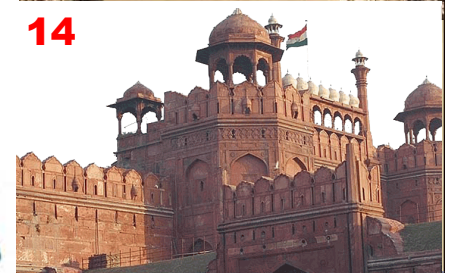
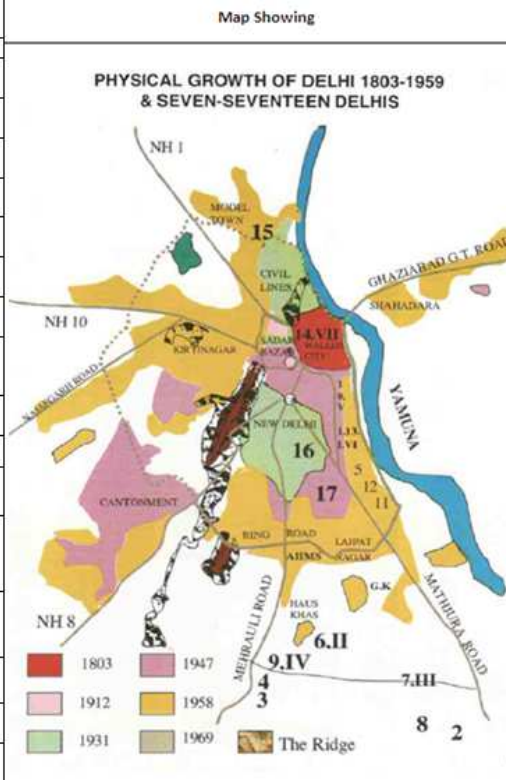
NEED OF STUDY

- Delhi, the fast growing Capital City of India presently 17 million population. After Independence (1951) Delhi had 1.43 million and increased to 8.42 million by 1991.
- By the year 2021 estimated to grow in 23 million population: A MEGA CITY, almost at par with other megapolises including Tokyo, Seoul, New York, Mexico city, London.
- Total land: 1483 sq km, length 51.90 kms, width 48.48 kms, about 50% been urbanised and the rest is under heavy pressure of urbanisation.
- Huge population not well dispersed. About 30 sq. km. around the Raisina Hill, most of the human habitats and activities are concentrated.
- During last two decades settlement of new colonies, business centres and other commercial activities have started expanding to the rural areas of the NCT
- The runaway growth of Delhi continues and form new urban pockets i.e Gurgaon, Faridabad, Ghaziabad, Noida, Greater Noida etc.
- Whether economic and demographic concentration in Delhi has already reached a point at which the social cost of agglomeration exceeds the benefits and need a combined effort to **REVIVE THE SHRINKAGE ITS PRIMACY.**

DAWN OF CITY



Order	Date	Name of the Settlement	Founder	Present Probable Site
1	900 BC	Indraprastha	Yodhisra	Purana Quilla
2	1020 AD	Suraj Kund	Anang Pal	Near Qutab Minar
3	1052	Lal Kot	Prithviraj Chauhan	Near Qutab Site
4	1180	Quilla Rai Pithora	Prithviraj Chauhan	Untraceable
5	1288	Kilokheri	Muiz-Ud-Din Kaiquabad	Untraceable
6	1301	Siri	Alauddin Khilji	Near Haus Khas
7	1321	Tughlaqabad	Gayasudin Tuglaq	Near Qutab Minar
8	1325	Adilabad	Mohammad Tuglaq	Near Tughlaqabad
9	1327	Jahanpanah (World's Refuge)	Mohammad Tuglaq	Between Siri and Raipithora
10	1354	Ferozabad	Feroz Shah Tughiaq	Near Ferozsah Kotla Stadium
11	1415	Khirabad	Khirabad	Untraceable
12	1425	Mubarakabad	Mubarak Shah	Untraceable
13	1530	Dimpanah and Sher Garh	Humayun and Sher Shah Sur	Purana Quilla
14	1638	Shahjahanabad	Shahjahan	Walled City (Old Delhi)
15	1912	Delhi	British Capital	South of Walled City
16	1931	New Delhi	Lutyens and Baker	British Capital
17	After 15/8/1947	New Delhi	TCPO, TPO and DDA	Delhi Urban Area

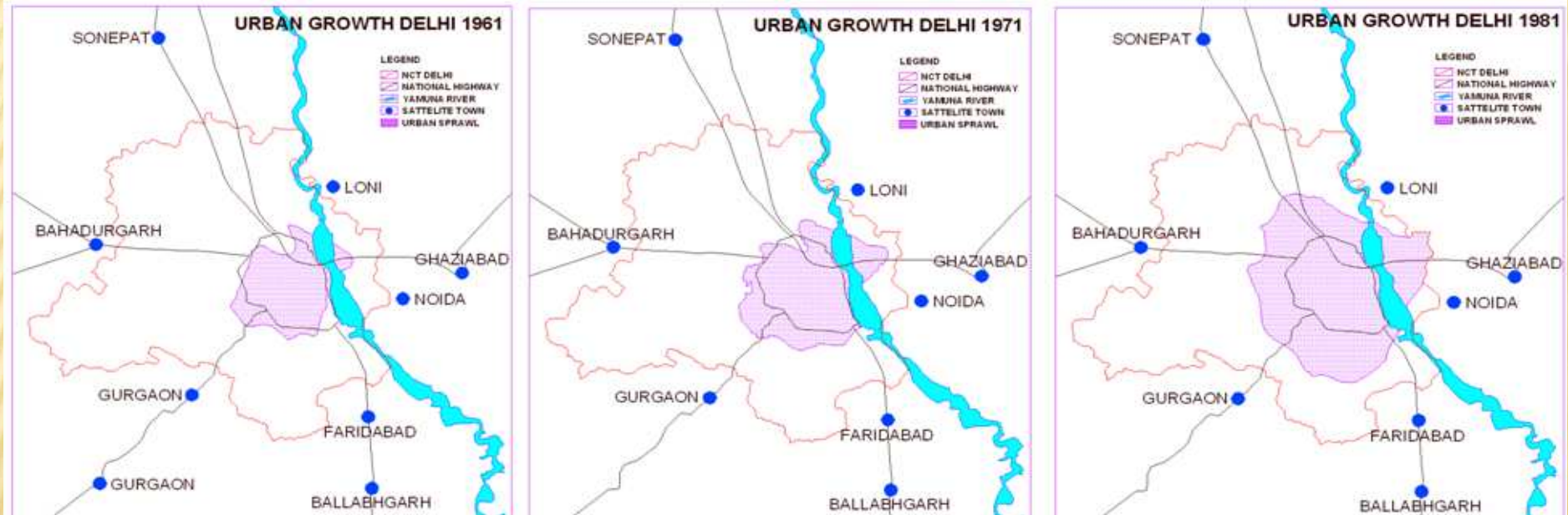


Spatial Growth of Delhi in Chronological Order

SPATIO-TEMPORAL GROWTH OF DELHI

- Urban planning commenced in 1824 when a Town Duties Committee was constituted for the development of the Cantonment, Khyber Pass, the Ridge area and the Civil Lines area by the Britishers.
- First Municipal Committee of Delhi in 1883 and The Municipal Building byelaws were in operational in Sadar Bazaar, Subzi Mandi and other suburbs. City spreads with single floor spatial extents.
- The Delhi Improvement Trust (DIT) was contributed in March 1937. In addition to manage the acquired land, Najul Land, DIT was also assigned the job of rehabilitation of the households to be shifted from slums and substandard areas.
- On December 30, 1957, Delhi Development Authority (DDA) was set up under the Delhi Development Act, 1957 as a successor to DIT for the planned development of Delhi. DDA prepared a Master Plan for Delhi (MPD), which was published in 1962.
- The Yamuna River and terminal part of the Aravalli hill range are the two main geographical features of the city.

SPATIO-TEMPORAL GROWTH OF DELHI



1961: Growth over years ring and radial pattern with reliance on road based transport with a hierarchy of commercial centres located on either ring or radial roads.

1971: City sprawls starts from single Central Business District (CBD) Cannught place to several CBDs like Nehru Place, Bikaji Cama, Janakpuri, IP Extension.

1981: Development of 44,770 hectares (ha) for 46 lakhs. Subsequently, development of an additional 4000 ha of urban area at Patpar Ganj (East Delhi), Sarita Vihar (South West Delhi) and Vasant Kunj (South Delhi) was added in the target of the first MPD with flats. The plotted development Delhi turns to group housing stocks.

SPATIO-TEMPORAL GROWTH OF DELHI

- Sharp increase in the density of population. In 1901, the density was 274 persons per Sq. Km. 1176 persons per Sq. Km. in 1951 , 9294 persons per Sq. Km. in 2001.

Trend of Urbanization in Delhi 1901-2001

Census Year	Population			Annual Exponential Growth Rate
	Total	Urban	% Urban	
1901	405819	214115	52.76	-
1911	413851	237944	57.50	1.1
1921	488452	304420	62.32	2.5
1931	636246	447442	70.33	3.9
1941	917939	695686	75.79	4.4
1951	1744072	1437134	82.40	7.3
1961	2658612	2359408	88.75	5.0
1971	4065698	3647023	89.68	4.4
1981	6220406	5768200	92.73	4.6
1991	9420644	8471625	89.93	3.8
2001	13782976	12819761	93.01	4.1

SPATIO-TEMPORAL GROWTH OF DELHI

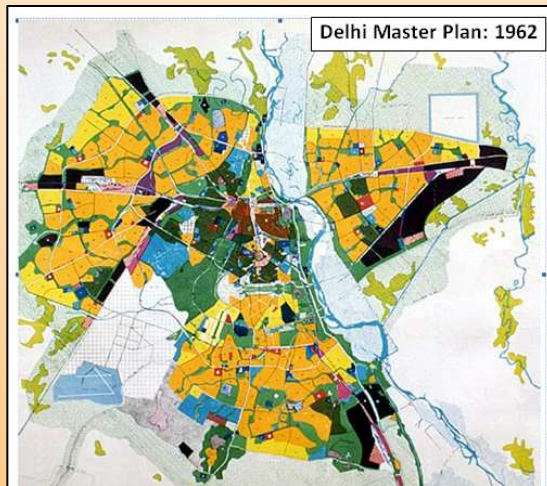


1991: Envisaged acquisition of 20,000 Ha of land for making a target for development of 68,770 Ha urban area.

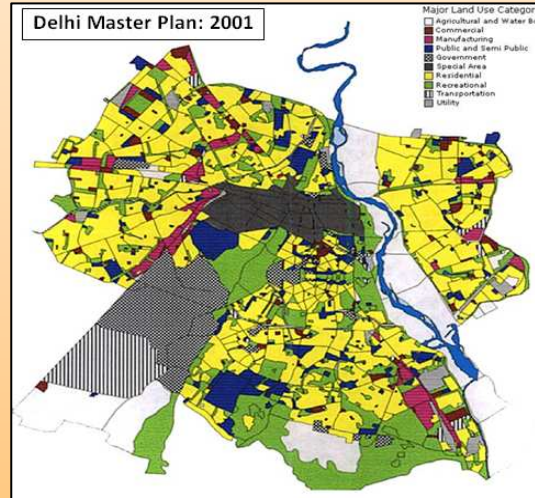
2001: 83,804 ha of land within the framework of MPD 2001. includes 3360 ha area for urban development along National Highways, 1996 ha of Dwarka Ph II and 9700 ha of Yamuna River bed with High Rise building.

2011: NCR projected population of 11.2 million for Delhi by 2001, on the assumption 2 million people would be deflected to other ring towns, earlier DMA Towns: Ghaziabad and Noida, Greater Noida, Faidabad, Gurgaon, Bahadurgarh-Kondli, Loni, Sonpath, Panipath

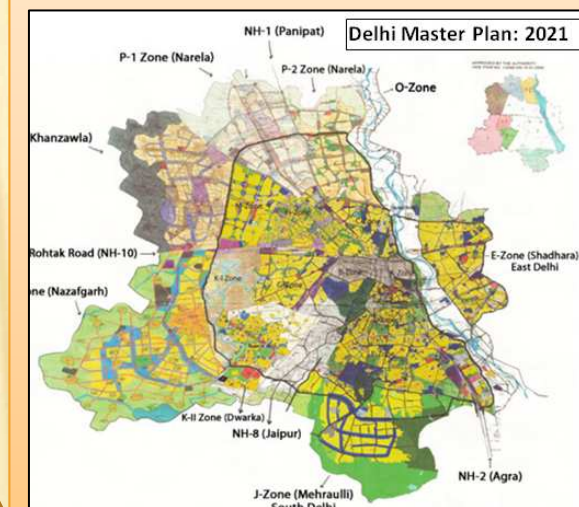
CITY GROWTH WITH DIFFERENT MASTER PLANS



- Accomodation for Government Employee.(Ramkrishna Puram, Moti Bagh, Gol Market)
- Secretariat as the nucleus
- Growth towards Civil Lines
- Business Centre: C.P., Along Ring roads,Shahdara
- Industrial: Availability of Railroad & facilities: Rohtak Road, Najafgarh Road Okhla & Shahdara ect.....



- Accomodation High density urban development :Public & private (Dwarka, Patpar Ganj, Rohini, Vasant Kunj)
- Policy on tall Buildings, Environment and Heritage Conservation, Restriction for institutional development moving towards ring towns
- Business Centre: Multi core



- PPP: Real Estate Development
- Change in FAR (Plotted to multi storied)
- Restructuring with Mass Trasport: Metro, BRTS, DMIC, Airport expansion, Dry Port, Integrated Office Complex.
- 100% Area Covered, no future spatial expansion

PULL & PUSH FACTOR FOR SHRINKAGE OF PRIMACY



- At this pace of population growth, the entire NCR Delhi may have to be declared as 'urban' with very limited scope for horizontal expansion as the situation has reached saturation level
- To manage 23 million populations in NCT Delhi by 2021 will be a challenging task for all concerned
- NCT Delhi cannot be viewed as the sole center of development.
- Instead of NCT Delhi National Capital Region will be more prominent for future development. To make this possible there is need to reframe:
 1. Institutional Strengthening
 2. Removal of Ring Towns entity into one unit (NCR)
 3. Ensuring supply of basic services in all localities
 4. Ensuring universal access to space and services
 5. Augmentation of infrastructure
 6. Improving physical planning and design: Urban renewal
 7. Enhancing Floor Area Ratio
 8. Public-Private partnership for revenue generation



ANY QUESTIONES ?



THANK YOU